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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,848	05/09/2002	Jussi Rajala	4925-215PUS	2821

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EXAMINER

NGUYEN, STEVE N

ART UNIT	PAPER NUMBER
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2138

DATE MAILED: 05/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/070,848

Applicant(s)

RAJALA ET AL.

Examiner

Steve Nguyen

Art Unit

2138

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 5, 8-11, 15, 18-22, 24, 27, 31, 34-36, 38, 41, 42, 46, 49, 50 and 55-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 5, 8-11, 15, 18-22, 24, 27, 31, 34-36, 38, 41-42, 46, 49-50, and 55-62 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 May 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1, 5, 8-11, 15, 18-22, 24, 27, 31, 34-36, 38, 41-42, 46, 49-50, and 55-62 are currently pending.

Claim Objections

2. The objections to claims 8, 18, 22, 36, and 41 are withdrawn.

Response to Arguments

3. Applicant's arguments filed 3/20/2006 have been fully considered but they are not persuasive.

The Applicant argues that neither Stevens, Chen '714, not Chen '719, nor the combined teachings thereof, disclose altering, at the receiver or at the receiving end of the transmission channel, a threshold condition for transmitting the acknowledgement message.

The Examiner contends that it would have been obvious to one of ordinary skill in the art to alter a threshold condition at the receiver. In the combined system of Stevens, Chen '714, and Chen '719, a predetermined threshold value coincides with a determined window size. The number of received data units is counted, and an acknowledgement is transmitted when the window size is reached. As disclosed by

Chen '714, the window size can be adjusted in response to the error rate of the transmission channel.

The applicant points out on page 13 of the Remarks that the actual window size of Chen '714 is set at the sender terminal 26 in the memory 32 of Fig. 1. However, the Examiner asserts that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to alter a threshold condition at the receiver for the following reasons. The threshold condition (window size) of the combined prior art is adjusted based on the error rate of the channel. The channel error rate can only be determined at the receiver by monitoring the incoming data from the transmitter. When the error rate is too high, the receiver must necessarily relay this information to the transmitter so that the window size can be adjusted.

Therefore, it would have been obvious to determine the optimal window size at the receiver, and send the window size information to the transmitter according to the channel error rate. This modification would have been obvious to one of ordinary skill in the art, at the time the invention was made, because one of ordinary skill in the art would have recognized that the window size is changed as a result of channel errors, and the channel error rate is determined at the receiver.

The Examiner disagrees with the Applicant and maintains all rejections of claims 1, 5, 8-11, 15, 18-24, 27, 31, 34-36, 38, 41-42, 46, and 49-50. All amendments and arguments by the Applicant have been considered. It is the Examiner's conclusion that claims 1, 5, 8-11, 15, 18-24, 27, 31, 34-36, 38, 41-42, 46, and 49-50 are not patentably

distinct or non-obvious over the prior art of record as applied in the last office action.

Therefore, the rejection is maintained.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 8, 18, 22, 36, 41, and 55-62 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 8 and 22 recite the limitation, "wherein said step of altering comprises increasing the count value by said predetermined value". However, the parent claim only requires **one of** increasing the count value by a predetermined value and decreasing said predetermined threshold value when a data unit erasure or loss has been detected. Therefore claims 8 and 22 lack antecedent basis for "increasing the count value" when decreasing said predetermined threshold value is performed. The above similarly applies to claims 18, 36, and 41.

Claims 55 and 57 recite the limitation, "wherein said step of altering a threshold condition comprises increasing the count value by a predetermined value'. However, the parent claim only requires **one of** increasing the count value by a predetermined value and decreasing said predetermined threshold value when a data unit erasure or loss has been detected. Therefore claims 55 and 57 lack antecedent basis for

"increasing the count value" when decreasing said predetermined threshold value is performed. The above similarly applies to claims 59 and 61.

Claims 56 and 58 recite the limitation, "wherein said step of altering a threshold condition comprises decreasing said predetermined threshold value." However, the parent claim only requires **one of** increasing the count value by a predetermined value and decreasing said predetermined threshold value when a data unit erasure or loss has been detected. Therefore claims 56 and 58 lack antecedent basis for "decreasing said predetermined threshold value" when increasing the count value is performed. The above similarly applies to claims 60 and 62.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1, 5, 6, 8, 9, 22, 24, 27, and 42 rejected under 35 U.S.C. 103(a) as being unpatentable over Stevens in view of Chen et al (US Pat. 4,970,714; hereinafter referred to as Chen-714) in view of Chen et al (US Pat. 5,751,719; hereinafter referred to as Chen-719).

See the Non-Final rejection filed 9/19/2005 for a detailed action of prior rejections.

Claims 55-58 rejected under their respective parent claims as failing to further limit the parent claim.

6. Claims 11, 15, 18-20, 36, 38, and 41 rejected under 35 U.S.C. 103(a) as being unpatentable over Chen-714 in view of Chen-719.

See the Non-Final rejection filed 9/19/2005 for a detailed action of prior rejections.

Claims 59-62 rejected under their respective parent claims as failing to further limit the parent claim.

7. Claims 10, 31, 34, and 35 rejected under 35 U.S.C. 103(a) as being unpatentable over Stevens in view of Chen-714 in view of Chen-719 as applied above, and further in view of Rathonyi et al (US. Pat. 6,359,877).

See the Non-Final rejection filed 9/19/2005 for a detailed action of prior rejections.

8. Claims 21, 46, 49, and 50 rejected under 35 U.S.C. 103(a) as being unpatentable over Chen-714 in view of Chen-719 as applied above, and further in view of Rathonyi et al (US. Pat. 6,359,877).

See the Non-Final rejection filed 9/19/2005 for a detailed action of prior rejections.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Nguyen whose telephone number is (571) 272-7214. The examiner can normally be reached on M-F, 9am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steve Nguyen
Examiner
Art Unit 2138



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